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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,532	02/10/2004	Anna-Mari Vimpari	061602-5500	1088
27433 7590 05/16/2008 FOLEY & LARDNER LLP 321 NORTH CLARK STREET SUITE 2800 CHICAGO, IL 60610-4764				
EXAMINER				
JUNTIMA, NITTAYA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/774,532

Applicant(s)

VIMPARI ET AL.

Examiner

NITTAYA JUNTIMA

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/5508)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

1. This action is in response to the amendment filed on 2/11/2008.
2. Claims 1-20 are pending.
3. Claims 1-20 are currently rejected under 35 U.S.C. 112, first paragraph.
4. Claims 3-4, 7-8, and 16-17 are currently rejected under 35 U.S.C. 112, second paragraph.
5. Claims 1, 2, 5-15, and 18-20 are currently rejected under 35 U.S.C. 102(e).

Drawings

6. The drawings are objected to because:
 - Figures 2(a) and 3(a) should be designated by a legend such as --Prior Art— because only that which is old is illustrated (see specification, page 14, lines 21-22 and page 15, lines 13-14). See MPEP § 608.02(g).
 - In Figs. 2(a)-2(c) and 3(a)-3(c), the shaded boxes identifying TcCH1-TrCH3 should be changed (e.g., filled with different shapes/lines or labeled, see example in Fig. 2 of US 2004/0100918A1) so that they can be easily identified when connected together in the DPDCH structures (the current black/gray boxes do not show the boundary of each TrCH well).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claims 1-20** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
9. In claims 1 and 15, lines 4-5, the specification fails to disclose how "an additional combination of selectable transport formats, which determines a maximum allowable data rate" (emphasis added). Note that the additional combination of selectable transport formats (new

TFC) itself cannot determine any data rate since it is a group of transport formats, not capable of performing any determination function.

The specification, however, discloses that the new TFC defines a new maximum data rate (page 11, lines 5-6). Therefore, in light of the specification, the Office is interpreting the claim as "an additional combination of selectable transport frames, which defines a maximum allowable data rate."

10. In claims 3 and 16, lines 3-4, similar to claims 1 and 15, the limitation "a new transport format combination which determines for said predetermined channel a new transport format leading to said maximum allowable data rate" is not disclosed in the specification.

However, in light of the specification (page 13, lines 13-16), the Office is interpreting the limitation as "a new transport format combination which defines for said predetermined channel a new transport format leading to said maximum allowable data rate."

11. In claims 5 and 18, lines 3-4, similar to claims 1 and 15, the limitation "a transport format which determines said maximum allowable data rate" is not disclosed in the specification.

However, in light of the specification (page 13, lines 24-page 14, lines 4), the Office is interpreting the limitation as "a transport format which defines said maximum allowable data rate."

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. **Claims 3-4, 7-8, and 16-17** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. In claims 3 and 16, it is unclear what “a set of transport format combinations selectable for said at least one channel” and “a new transport format combination” means. Are they the same as “an additional combination of selectable transport formats” and “a predetermined set of selectable combinations of selectable transport formats” recited in claims 1 and 15? If so, why are they being called differently?

15. In claim 7, the limitation “wherein said predetermined channel is located at a predetermined fixed position within said at least one channel” is vague and indefinite. It is unclear what the predetermined channel is. What is a predetermined fixed position within said at least one channel? Is “said at least one channel” a last transport channel? If so, what does it mean by a predetermined channel located at a predetermined fixed position within the last transport channel? Also, how can the predetermined channel be located at a fixed position within the at least one channel?

In order to proceed with the examination, the Office is interpreting the limitation as “wherein said predetermined channel is located at a predetermined fixed position within said data transmission stream.”

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. **Claims 1, 2, 5-15, and 18-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Toskala (US 2004/0100918 A1)

The applied reference has common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding **claims 1, 15, and 20**, Toskala teaches a method, performed by node B which is a base station (paragraphs 0024 and 0030), for providing a predetermined transmission rate for an auxiliary information (control information, paragraph 0030) in a predetermined channel of a data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8), said method comprising:

Setting for said data transmission stream an additional combination of selectable transport formats (TFC for defining that there is *always* room for DTX), which defines a maximum allowable data rate (data rate in a transport channel plus *n* DTX indication bits allocated for the transport channel) higher by a predetermined rate amount (some *n* DTX indication bits within the at least *N* DTX indication bits in the TFC must be allocated for a

transport channel, paragraph 0031) than the maximum data rate of a signal transmitted via said predetermined channel, into a predetermined set of selectable combinations of selectable transport formats (since paragraph 0031 teaches that the TFC for defining that there is always room for DTX is used, and paragraphs 0047 and 0050 indicates that a third generation WCDMA network is utilized having WCDMA frame structure as described in the 3GPP specifications, therefore, this TFC must be set in a TFCS as defined by the 3GPP specifications. See also Figs. 2-7 which show how DTX indication bits are allocated for a transport channel).

Using said predetermined rate amount of said predetermined channel to transmit said auxiliary information (node B sends control information to the UE by replacing the DTX indication bits by the control information, paragraph 0030).

Regarding **claim 2**, Toskala teaches that said transmission stream is a multiplex signal having at least one channel (the multiplex signal contains multiple transport channels, paragraph 0069), and said selectable transport formats can be allocated to said at least one channel (transport formation combination contains one transport format for each transport channel, paragraph 0050).

Regarding **claim 5**, Toskala teaches adding to said data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8) a new channel, and allocating to said new channel a set of selectable transport formats comprising a transport format which defines said maximum allowable data rate (Fig. 6 shows a third transport channel between TrCH A and B being configured as dummy transport channel for fixed

positions and Fig. 7 shows a dummy transport channel TrCH C for flexible positions, therefore a set of selectable transport formats having a transport format for defining the maximum allowable data rate must be included, paragraphs 0059 and 0063).

Regarding **claims 6 and 19**, because paragraphs 0047 and 0050 indicate that a third generation WCDMA network is utilized having WCDMA frame structure as described in the 3GPP specifications, therefore, it is inherent that a restriction for using only a subset of selectable transport format combinations for the data transmission stream (the multiplex signal output from a transport channel multiplexing function 120 in Fig. 8, i.e., CCTrCH) must be included as described in the 3GPP specifications.

Regarding **claims 7 and 8**, Toskala teaches that the predetermined channel is located at a predetermined fixed position which corresponds to the last channel position within a frame of said data transmission stream (paragraph 0026 discloses that "If the dummy transport channel is provided at fixed positions, any transport channel can be used the dummy transport channel," therefore, the last transport channel of a multiplex signal, i.e., CCTrCH, constitutes the last channel position within a frame of said data transmission stream).

Regarding **claim 9**, it is inherent that the TFC which defines that there is always room for DTX must define the maximum allowable data rate that defines transport blocks of a predetermined size in the data transmission stream (the multiplex signal, paragraph 0069) since the number of bits is known. See paragraphs 0027 and 0030.

Regarding **claim 10**, Toskala teaches that the auxiliary information comprises a discontinuous transmission information (DTX, paragraphs 0029-0030).

Regarding **claim 11**, Toskala teaches that said channel is a dedicated channel (a transport channel carrying dummy bits replaced with control information is part of a dedicated link, paragraphs 0049 and 0069).

Regarding **claim 12**, Toskala teaches that said data transmission stream is a downlink signal of a cellular network (a downlink of a WCDMA, paragraph 0069).

Regarding **claim 13**, Toskala teaches that said auxiliary information is replaced by a control information (DTX indication bits are replaced by control information, paragraph 0030).

Regarding **claim 14**, Toskala teaches that said control information comprises HSDPA signaling information (paragraph 0034).

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NITTAYA JUNTIMA whose telephone number is (571) 272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on 571-272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NJ/
Examiner, Art Unit 2616
5/10/2008

/FIRMIN BACKER/
Supervisory Patent Examiner, Art Unit 2616